

# Zero Beat



Hampden County Radio Association, Inc. - our 47th ARRL affiliated year

1-95

January 1995

Volume 3 Issue 5

### H.C.R.A. Notes.....

ast month's HCRA featured the annual holiday social. It was an entertaining evening of socializing, despite the limited food. We had a good turnout of 50+ people and did not realize until it was too late that we were limited on food. Thanks go out to everyone who came and especially those who brought some show & tell. Everyone who attended seem to have a good time.

It is also the final time you will be able to renew your membership before your Zero Beat's will be cut off. This was mentioned last month, but we felt we would be nice and give you one more opportunity. This applies to those



Fiappy New Year!, this month will feature a meeting about the comet impact on Jupiter. Be sure to attend! Don't Forget the Jan. VHF test on Jan. 21-22.

of you who have not renewed of coarse. (Check your membership label.) You will find an application in the past month's issues of Zero Beat. In addition to renewing yourself, consider telling a friend about our club and bring them to an upcoming meeting. The HCRA would like to continue to grow even more! See you at the January meeting!

# Next HCRA Meeting.....

he next Hampden County Radio Association meeting will Take place on Friday night January 6, 1995 and will feature an interesting presentation about the comet that struck Jupiter earlier this year in the summer. It should be an informative talk for space enthusiasts and non space enthusiasts alike. Be sure and bring a guest for this interesting topic. It should be an entertaining evening. Doors will open at 7:30 and the meeting will begin around 8:00 P.M. We hope to see you there!

Feeding Hills
Congregational Church
JCT of Routes 57 & 187
Feeding Hills, Massachusetts

The next board meeting will take place on January 12, 1995 and will be at Greg Stoddard's QTH. If you are interested in attending, please ask Greg N1AEH for directions at the next meeting. Remember, anyone can attend the board meetings.

### Ham's Run NYC Marathon...

efore dawn on an unseasonably warm November 6, 1994, several hundred hams drove toward their stations along the streets of New York City to staff 26 checkpoints along the route of the 1994 New York City Marathon. Others gathered around base stations at both ends of the race route to begin testing the 12 official nets that tie this event together.

The NYC Marathon, with more than 30,000 entrants from all over the world, and upward of two million spectators (plus or minus a few,) defies conventional planning methods. Indeed, the Amateur Radio "game plan" assembled by race communication director Steve Mendelsohn, WA2DHF, and his team resembles a plan for the invasion of Normandy.

Continued on page 2

### **Happy New Year!**



in This Issue...

## Hams Run 1994 New York City Marathon (Cont.)......

It's one of the largest sports event in the world, and definitely one of the most visible. New York City is the media capital of the planet, and Sunday is a slow news day. So the chance to watch world class athletes hammering through all five boroughs attracts television cameras and newspaper photographers from every major media outlet.

That visibility helps Amateur Radio, says Mendelsohn, who is also ARRL Hudson Division director.

"This is a chance for Amateur Radio to shine nationally," he says. "Network TV coverage always gives us a pat on the back, and millions of New Yorkers get to see us 'up close and personal,' contributing to the health and safety of runners and spectators alike."

But the proof of any marathon is the running, and through the years, hams have provided increasing logistics expertise to manage course communication, start and finish communication, and a traveling circus of runners, camera trucks, and

police, emergency, and support vehicles, as the race wends its way safely through the cheering crowds of the city's five boroughs.

Many hams remained on duty even as the slowest runners staggered to the finish line in Central Park long after dark.

The Amateur Radio operation uses a number of VHF and UHF frequencies, both repeater and simplex, with equipment loaned by ham volunteers from New York, New Jersey, and Connecticut. The radio operation is supplemented by cellular telephone and commercial radio links to cover every communication contingency.

"Without hams, this event would have had a rockier start," says Mendelsohn. "Since Amateurs first got talked into participating back in 1976, with one repeater and 24 volunteers, we've developed an elite team of communication logistics experts, to do everything from coordinating the delivery of water to the 30 official water stations,

to providing high priority medical information reports.

"We now have a core of more than 400 amateur who probably could handle communications for anything from a big sports event to a major catastrophe. It demonstrates to the nation what we can do when the stakes are high and there's no margin for error."

Mendelsohn says that the Amateur Radio medical nets were particularly busy this year, as higher than normal temperature and humidity pushed runners who had prepared for cooler November weather. There were hundreds of heat related illness, some serious, and more than a hundred requests for ambulances. Without the rapid communication capacity of hams to provide early warning to medical officials, the toll might have been higher.

The 1994 Marathon was the first to be run without the firm guiding hand of race Director Fred Lebow, who died from cancer in October. According to Mendelsohn, it was Lebow who challenged the hams every year to attempt the impossible, and inspired them to achieve it.

Mendelsohn says, "every ham who ever worked on the Marathon with Fred was a better person for having done so. He understood how valuable ham radio is, and gave us complete confidence and support. His faith in us was an honor we never took for granted."

# 1995 H.C.R.A. Board of Directors



### Officers

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	Expiring 1996	6		

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NR1L Kevin Hillinsid
KA1YZV Donald Lynch

Coffee + Donuts: Don + Betty Mish Zero Beet: Kevin Hillinski NR1L - Editor, Mike Griffin N1FOW & Barry Meson N1LIK - Zero Beet Assistance (folding & stamps)

### President's Message

Seasons Greetings! I hope you have all had a great holiday season, and on behalf of the Executive Board and Board of Directors, I wish you a happy and healthy new year.

Since the weather has been relatively warm for this time of year, I hope you have had a chance to adjust any outside equipment you have before the snow sets in and it really gets cold.

The new HCRA net is set to start Monday January 9th at 7:30 P.M. (the Monday after our January meeting.) This will be an informal net, one where we can most once a week to say "Hi" and see what's new in between the meetings. The frequency for this net will be 28.410 MHz. This is within the code tech frequencies, so all you coded techs join in, and if you are a codeless tech, this is a good reason to learn. If you don't have an antenna for ten meters, just throw up a dipole, but be there!

Two quick notes: First, we are planning to have field day at the Agawam High School this year, as we have had in the past. (Except of coarse last year.) Plan on being there, and bring someone interested in our hobby. Finally, consider running for a position on the Executive Board, or Board of Directors for next year. I know it is early to be thinking about it, but nominations will be taking place in a few months, and the club needs your support!

We have a great program for you this month: Michael Skrutskie, Ph.D., of the UMASS physics and astronomy department will give a slide presentation on the comet Shoemaker-Levy, the comet that crashed into Jupiter this year. UMASS as a world class astronomy department, and along with this months program, we hope to tap into this resource and bring a radio astronomy program later this year. Until I see you at the meeting,

73, Barry N1LJK

Well, it's time once again for the January VHF Sweepstakes Contest. Hopefully by now you've got all of your equipment fired up and working correctly, and or, your plans are all set for a multiop or rover effort. Here's some information that should be helpful to maximize or make you effort more efficient.

- GET ON AND OPERATE!! It doesn't matter how large or small the effort is, but please make an effort. The more entries sent in the better!
- 2. Activity Hours: all listed in local (EST) time.

222 MHz - 8pm - 9pm , 8am - 9am , 8pm - 9pm 432 MHz - 9pm - 10pm , 9am - 10am , 9pm - 10pm 903 MHZ \ 1296 MHz - 10pm - 11pm , 10am - 11am , 10pm - 11pm 2304 MHz /

These activity hours are recognized as a standard, and this is when the most activity is concentrated on these bands.

There are no recognized activity hours for 6 or 2 meters.

- 3. FH Operation: With the inter-club competition with the MTARA, the FH bands should be very busy. The following frequencies should be used on FM.
- 2 METERS 146.49 , 146.55 , 146.58 \*\*\* CAUTION \*\*\* USE OF 146.52 FOR CONTESTING IS NOT ALLOWED! 1 1/4 METERS - 223.5 ONLY 70 CENTIMETERS - 446.000 ONLY

Anytime that you can get on the FH bands, I'm sure you'll find plenty of activity.

- 4. SEND YOUR SCORE IN II Get it in before the deadline. In order for your score to go towards the HCRA CLUB SCORE, just be sure to mark your entry for club affiliation as HAMPDEN COUNTY RADIO ASSOCIATION. Please send your logs directly to the ARRL.
- 5. HAVE FUN !!! Remember, we're AMATEUR RADIO OPERATORS.
  This means we enjoy communicating with our radio equipment as a hobby for FUN. So try not to get frustrated if there is QRM or other problems, remember the only thing this contest is about is communicating with as many of your fellow hams as possible. So again, HAVE FUN, and GOOD LUCK !!!

Zero Beat is a monthly publication except in July and August by the Hampden County Radio Association, inc. Any article may be reprinted as long as credit is given to the publication and its author(s). This issue would not be possible without the help of Barry Mason. Thanks, EDITOR

		VHF	<b>SWEE</b> PSTAKES	ENTRY FORM	
	CLUB AF	FILIATION:	HAMPDEN CO	UNTY RADIO ASSOCIA	ATION
	CATAGOR	Y: (CHECK	ONE)(FILL I	N BANDS WHERE APP	LICABLE)
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	8	INGLE OPER	ATOR, MULTI	BAND	
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	L	MITED HUL	TIOPERATOR,	4 BANDS MAX.	
	NI	ULTIOPERAT	OR		
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50	6 MTRS		X 1		
144	2 MTRS		X 1		
222	1 1/4		· X 2		
432	70 cm		X 2	***************************************	
903	33 cm		X 4		***************************************
1296	23 cm	-	X 4		
2304	13 cm		X 8		
3456	7 cm		X 8		
5760	5 cm		X 8		<del></del>
10368	2.5 cm		X 8		
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# Rules, 48th January VHF Sweepstakes

1) Object: To work as many amateur stations in as many 2°×1° grid squares as possible using authorized frequencies above 50 MHz. Poreign stations work W/VE amateurs only.

2) Contest Period: Begins at 1900 UTC

Saturday, January 21, and ends at 0400 UTC Monday, January 23.

3) Categories:

(A) Single Operator: One person performs all operating and logging functions.

(1) Multiband.

(2) Single Band: Single-band entries in 50, 144, 222, 432, 902, 1296 and 2304-and-up categories will be recognized in QST score listings and in awards offered. Contacts may be made on any and all bands without jeopardizing single-band entry status. Such additional contacts are encouraged and should be reported. Also see Rule 9, Awards.

(B) Single Operator, QRP Portable: Run 10 W output or less using a portable power source from a portable location. The intent of this rule is to encourage operation from "remote" locations, not to have home or fixed sta-

tions run low power.

(C) Rover: One or two operators of a single station that moves among two or more grid squares during the course of the contest. A rover vehicle may transport only one station using a single call sign; thus a rover may not operate with multiple call signs under the family rule 7(C). Rover vehicles must transport all the equipment, power supplies, and antennas used at each operating site. This rule is not intended to prevent an operator from using the same call sign to submit separate logs for single operator (fixed station) and rover entries. Rovers sign "rover" on phone and /R on CW after their call sign. All rovers are encouraged to adopt operating practices that allow as many stations as possible to contact them. Rovers entering club competition must indicate the grid squares where operating sites were within their club's area, as spelled out in the Club Competition Rules (January QST). Only scores from those operating sites count toward the club's aggregate score for club

(D) Multioperator: Multioperator stations must locate all equipment (including antennas) within a circle whose diameter does not

exceed 300 meters (1000 feet).

(E) Limited Multioperator: Multioperator stations that submit a maximum of four bands for score are eligible. Logs from additional bands used should be included as

4) Exchange: Grid-square locator (see April 1994 QST, page 87). Example: WIAW in Newington, Connecticut would send FN31. Exchange of signal report is optional.

5) Scoring:

(A) QSO points: Count 1 point for each complete 50 or 144-MHz QSO. Count 2 points for each 222 or 432-MHz QSO. Count 4 points for each 902 or 1296-MHz QSO. Count 8 points for each 2.3-GHz-or-higher QSO.

(B) Multiplier: The total number of different grid squares worked per band. Each 2°×1° grid square counts as one multiplier on

each band it is worked.

(C) Final score: Multiply the total number of QSO points from all bands operated by the total number of multipliers for final score (see scoring example).

(D) Rovers only: The final score consists

Band		aso	Grid
(MHz)	QSOs	<b>Points</b>	Squares
50	25 (x1)	25 :	10
144	40 (×1)	40	20
222	10 (x2)	20	5
432	15 (x2)	<b>30</b> ,	10
902	36 (×4)	144	9
1296	5 (×4)	20	3
2304	1 (×8)	8	1
<b>576</b> 0	1 (×8)	8	1
Totals	133	295	59
		Points) ×	(Total no. of
Grid Squ	Jares) = 295 × 59	i	

of the sum of the scores made from each grid square. Submit separate logs for each grid square where operating sites were established and score them individually, as explained in paragraphs (A) through (C) above. Then add the scores from each grid square on the summary sheet for your total rover score. Rovers are listed in the contest score listings under the Division from which the highest aggregate score was

(A) Retransmitting either or both stations, or use of repeater frequencies, is not permitted. This prohibits use of all repeater frequencies. Contest entrants may not transmit on repeaters or repeater frequencies on 2 meters for the purpose of soliciting contacts.

(B) Use of the national simplex frequency, 146.52 MHz, or immediate adjacent guard frequencies is prohibited. Contest entrants may not transmit on 146.52 for the purpose of making or soliciting QSOs. The intent of this rule is to protect the national simplex frequency from contest monopolization. There are no restrictions

on the use of 223.50 MHz.

(C) Only recognized simplex frequencies may be used, such as 144.90 to 145.00; 146.49, .55 and .58, and 147.42, .45; .48, .51, .54 and .57 MHz on the 2-meter band. Local-option simplex channels and frequencies adjacent to the above that don't violate the intent of (A) or (B) above or the spirit and intent of the band plans as recommended in The ARRL Repeater Directory may be used for coatest purposes.

7) Miscellaneous:

(A) Stations may be worked for credit only once per band from any given grid square, regardless of mode. This doesn't prohibit working a station from more than one grid square with the same call sign (such as a rover). Crossband QSOs don't count. Aeronautical mobile contacts don't count.

(B) Partial QSOs don't count. Both call signs, the full exchange and acknowledgment

must be sent and received.

(C) A transmitter used to contact one or more stations may not be used subsequently under any other call sign during the contest period (with the exception of family stations, where more than one call sign is assigned to one location by the PCC/DOC); one operator may not give out contest QSOs using more than one call sign from any one location. The intent of this rule is to accommodate family members who must share a rig, not to manufacture artificial contacts.

(D) Only one signal per band (6, 2, 11/4,

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etc) at any given time is permitted, regardless of

(B) While no minimum distance is specified for contacts, equipment should be capable of real communication (ie, able to communicate over at least 1 km).

(F) Multioperator stations may not include QSOs with their own operators except on frequencies higher than 2.3 GHz. Even then, a complete, different station (transmitter, receiver and antenna) must exist for each QSO made under these conditions.

(G) A station precisely on a dividing line between grid squares must select only one as the location for exchange purposes. A different grid-square multiplier can't be given out without moving the complete station (including antennas) at least 100 meters.

(H) Above 300 GHz, contacts are permitted for contest credit only between licensed amateurs using coherent radiation on transmission (eg, laser) and employing at least one stage of electronic detection on receive.

(I) Marine Mobile (and Maritime) entries will be listed separately as "Marine Mobile" in the listings and compete separately for awards.

(J) Participants are reminded that the segment 50.100 to 50.125 MHz should be used for intercontinental QSOs only, using 50.125 MHz as a calling frequency then moving to another frequency after contact is established.

8) Reporting:

(A) Entries must be postmarked no later than 30 days after the end of the contest (February 23, 1995). No late entries can be accepted. Use ARRL January VHF Sweepstakes forms, a reasonable facsimile, submit your entry on diskette, upload your entry to the ARRL BBS, or send your entry to ARRL HQ via Internet.

(1) Official entry forms are available from HQ for an SASE with 2 units of Pirst-Class

postage or 4 IRCs.

(2) You may submit your contest entry on diskette in lieu of paper logs. The floppy dis-

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tette must be IBM compatible, MS-DOS formatted, 3½- or 5½-inch (40 or 80 track). The log information must be in an ASCII file, following the ARRL Suggested Standard File Format, and contain all log exchange information (band, mode, date, time in UTC, call sign of station worked, exchange sent, exchange received, multipliers [marked the first time worked] and QSO points). One entry per diskette. An official summary sheet or reasonable facsimile with signed contest participation disclaimer is required with all entries.

(3) You may submit your contest entry via the ARRL BBS (203-665-0090) or via Internet to contest@arrl.org. Send your summary sheet file (Make sure it includes all the pertinent information outlined in the official ARRL summary sheet.) and your log file following the ARRL Suggested Standard File Format.

(B) Logs must indicate band, mode, date, time in UTC, call signs and complete exchanges (sent and received), multipliers and QSO points. Multipliers should be marked clearly in the log the first time they are worked. Entries with more than 200 QSOs total must include cross-check sheets (dupe sheets). Send entries to ARRL Contest Branch, 225 Main St, Newington, CT 06111.

Awards: Certificates will be awarded in the following categories.

(A) Single operator.

(1) Top single operator in each ARRL/ RAC Section.

(2) Top single operator on each band (50, 144, 222, 432, 902, 1296 and 2304-and-up categories) in each ARRL/RAC Section where significant effort or competition is evident. (Because the highest score per band will be the award winner for that band, an entrant may win a certificate with additional single-band endorsements.) For example, if WBØTEM has the highest single-operator all-band score in the lowa Section and his 50 and 222-MHz scores are higher than any other lowa single op's, he will earn a certificate for being the single-operator Section leader and endorsements for 50 and 222 MHz.

(B) Top single-operator, QRP portable in each ARRL/RAC Section where significant effort or competition is evident. Single-operator, QRP portable entries aren't eligible for singleband awards.

(C) Top rover in each ARRL Division and Canada where significant effort or competition is evident. Rover entries aren't eligible for single-band awards.

(D) Top multioperator score in each ARRL/RAC Section where significant effort or competition is evident. Multioperator entries aren't eligible for single-band awards.

(E) Top limited multioperator in each ARRL/RAC Section where significant effort or competition is evident. Limited multioperator entries aren't eligible for single-band awards.

10) Club Competition: ARRL-affiliated clubs compete for gavels on three levels: unlimited, medium and local. Details are in January QST.

11) Condition of Entry: Each entrant agrees to be bound by the provisions and the intent of this announcement, the regulations of his or her licensing authority and the decisions of the ARRL Awards Committee.

12) Disqualification: For excess duplicate contacts and call sign or exchange errors. See January QST for complete details.

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W1AW's schedule is at the same local time throughout the year. The schedule according to your local time will change if your local time does not have seasonal adjustments that are made at the same time as North American time changes between standard time and daylight time. From the first Sunday in April to the last Sunday in October, UTC = Eastern Time + 4 hours. For the rest of the year, UTC = Eastern Time + 5 hours.

#### O Moree code transmissions:

Frequencies are 1.818, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675 and 147.555 MHz.

Slow Code = practice sent at 5, 71/2, 10, 13 and 15 wpm.

Fast Code = practice sent at 35, 30, 25, 20, 15, 13 and 10 wpm.

Code practice text is from the pages of *QST*. The source is given at the beginning of each practice session and alternate speeds within each session. For example, "Text is from July 1992 *QST*, pages 9 and 81," indicates that the plain text is from the article on page 9 and mixed number/letter groups are from page 81.

Code bulletins are sent at 18 wpm.

#### □ Teleprinter transmissions:

Frequencies are 3.625, 7.095, 14.095, 18.1025, 21.095, 28.095 and 147.555 MHz. Bulletins are sent at 45.45-baud Baudot and 100-baud AMTOR, FEC Mode B. 110-baud ASCII will be sent only as time allows.

On Tuesdays and Saturdays at 6:30 PM Eastern Time, Keplerian elements for many amateur satellites are sent on the regular teleprinter frequencies.

#### O Voice transmissions:

Frequencies are 1.855, 3.99, 7.29, 14.29, 18.16, 21.39, 28.59 and 147.555 MHz.

#### □ Miscellanea:

On Fridays, UTC, a DX bulletin replaces the regular bulletins.

W1AW is open to visitors during normal operating hours: from 1 PM until 1 AM on Mondays, 9 AM until 1 AM Tuesday through Friday, from 1 PM to 1 AM on Saturdays, and from 3:30 PM to 1 AM on Sundays. FCC licensed amateurs may operate the station from 1 to 4 PM Monday through Saturday. Be sure to bring your current FCC amateur license or a photocopy.

in a communication emergency, monitor W1AW for special bulletine as follows: voice on the hour, teleprinter at 15 minutes past the hour, and CW on the half hour. Headquarters and W1AW are closed on New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving and the following Friday, and Christmas Day. On the first Thursday of September, Headquarters and W1AW will be closed during the afternoon.

# VHF ∞ UHF ∞ SHF Contest Log

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# January Meeting Comet impact on Jupiter



Friday January 6, 1995

Doors Open at 7:30 P.M. Meeting will begin around 8:00



Don't Forget the Jan. VHF Contest - Jan. 21-22, 1995.

Attention HCRA Members

This month is when the Hampden County Radio Association traditionally competes in the January VHF Sweepstakes. We plan on doing this again this year. Last year, we had a fairly decent score overall as a club. However, we were not included in QST do to some misunderstandings. Please be sure when you turn your score in to mark Hampden County Radio Association, in the spot on the score sheet where appropriate. See the remainder of this issue for more about this months contest along with date and times.

This Month's Special:

Editor: Kevin S. Hilinski NR1L

THIS MAY BE YOUR LAST ZERO BEAT - CHECK YOUR MAININ

Hampden County Radio Association, Inc. P.O. Box 482

West Springfield, MA 01090-0482

Old Glory

I IS a
For U.S. address only

First Class Mail

Forwarding + Address correction requested

